CLAIMS

1. A method of separating the chrominance and luminance of a composite colour television signal by comparing each of a set of first frequency components of the signal with a respective second frequency component of the signal, each second component having a frequency difference from the colour subcarrier equal and opposite to the frequency difference from the colour subcarrier of the associated first frequency component, characterised in that respective comparisons differ in dependence upon the frequency of the first frequency component.

2. A method according to Claim 1, in which the comparisons differ in dependence upon the horizontal spatial frequency of the said first frequency component.

3. A method according to Claim 1, in which the comparisons differ in dependence upon the vertical spatial frequency of the said first frequency component.

4. A method according to Claim 1, in which the comparisons differ in dependence upon the temporal frequency of the said first frequency component.

5. A method according to Claim 1, in which the comparisons differ in dependence upon horizontal, vertical or temporal differences of the composite television signal.

6. A method according to Claim 1, in which the comparisons differ in dependence upon horizontal, vertical or temporal differences derived from the chrominance demodulated output of the composite television signal.

7. A method according to any of the preceding Claims 1 to 6, wherein the comparison varies in dependence upon the magnitude of a third frequency component of the signal, said third component having a frequency which corresponds to the equivalent baseband chrominance frequency of the first frequency component.

8. A method according to Claim 7, wherein said third component has a frequency equal to the frequency difference between the frequency of the said first frequency component and the colour subcarrier frequency.

9. A method according to Claim 7 or Claim 8, wherein said third frequency component contains no chrominance information.

10. A method according to any one of Claims 7 to 9, in which the said separation favours chrominance when the said third frequency component has a magnitude which is greater than a threshold value.

11. A method according to any one of Claims 7 to 10, in which the said separation favours chrominance when the said third frequency component has an amplitude which is not substantially less than the amplitude of said first signal component.

12. A method of separating the chrominance and luminance components of a composite colour television signal by comparing a first frequency component of the signal with a respective second frequency component of the signal, the second component having a frequency difference from the colour subcarrier equal and opposite to the frequency difference of the first frequency component from the colour subcarrier, characterised in that the comparison is made by processing demodulated, baseband chrominance signals.

13. A method according to Claim 12, wherein respective comparisons differ in dependence upon the frequency of the first frequency component.

14. A method according to Claim 13, in which the comparisons differ in dependence upon the horizontal spatial frequency of the said first frequency component.

15. A method according to Claim 13, in which the comparisons differ in dependence upon the vertical spatial frequency of the said first frequency component.

16. A method according to Claim 13, in which the comparisons differ in dependence upon the temporal frequency of the said first frequency component.

17. A method according to Claim 13, in which the comparisons differ in dependence upon horizontal, vertical or temporal differences of the composite television signal.

18. A method according to Claim 13, in which the comparisons differ in dependence upon horizontal, vertical or temporal differences derived from the chrominance demodulated output of the composite television signal.

19. A method according to Claim 12 wherein the comparison varies in dependence upon the magnitude of a third frequency component of the composite signal, said third component having a frequency equal to the said first frequency component.

20. A method according to Claim 19 wherein the third freq component is a low frequency luminance component of the composite signal.

21. A method according to Claim 19 or Claim 20 in which the said separation favours chrominance when the said third frequency component has a magnitude which is greater than a threshold value.

22. A method according to Claim 19 or Claim 20 in which the said separation favours chrominance when the said third frequency component has an amplitude which is not substantially less than the amplitude of said first signal component.

23. A method of decoding a composite NTSC signal according to any of the preceding claims.

24. A method of decoding a composite colour television signal wherein distortion of the said signal is corrected characterised in that an upper chrominance sideband is identified and its amplitude corrected by making it equal to the amplitude of the corresponding lower chrominance sideband.

25. A method according to Claim 24 in which the corresponding lower sideband is identified in terms of its horizontal spatial, vertical spatial and temporal frequency.

26. A method of separating the chrominance and luminance components of a composite colour television signal, comprising decomposing an input signal into frequency components, and allocating a chrominance and luminance magnitude to components at each frequency, wherein the allocation of a particular component to chrominance is biased in

dependence upon a measure of the luminance information of the composite signal at a corresponding spatial frequency.

27. A method according to Claim 26, wherein the input is a composite television signal.

28. A method according to Claim 26, wherein the input is a demodulated chrominance signal.

29. A method of processing a television signal according to any of the preceding claims wherein the signal is sampled at an integer multiple of the line frequency.